Supplementary Table 1. Human studies addressing the effects of nutrition in Parkinson's disease.
E represents an epidemiological study and R represents a review.

Classification	Study Results	References
Dairy	**Dairy Constituents** Dairy fat, protein and lactose increases risk of PD.	E (Hellenbrand et al., 1996b;Chen et al., 2002;Park et al., 2005;Chen et al., 2007a;Kyrozis et al., 2013)
	Dairy consumption may increase the risk of PD, particularly in men.	E (Chen et al., 2007a)
	E (Saaksjarvi et al., 2013)	Milk consumption is positively associated with PD risk in women.
	Lack of association between dairy products and risk of PD.	E (Miyake et al., 2011c)
	High consumption of dairy results in low urate levels.	E (Choi et al., 2005a)
	High plasma levels of uric acid may modify the risk of PD.	R (Schlesinger and Schlesinger, 2008)
	Calcium Calcium and vitamin D are positively associated with PD risk only when derived from dairy products.	E (Chen et al., 2002)
	Vitamin D High consumption of food containing vitamin D increases risk of PD in humans.	E (Anderson et al., 1999)
Fat	**Fat** A higher risk of PD is seen with greater intake of total fat- saturated and animal.	E (Logroscino et al., 1996;Anderson et al., 1999;Chen et al., 2003)
	No association between PD and fat intake was observed.	E (Hellenbrand et al., 1996b;Logroscino et al., 1996;Johnson et al., 1999;Chen et al., 2002;Powers et al., 2003)
	A ketogenic diet provides symptomatic and disease-modifying activity in PD.	R (Gasior et al., 2006)
	A modified ketogenic diet consisting of mono and polyunsaturated fats improved the Unified Parkinson's Disease Rating Scale.	E (Vanitallie et al., 2005)
	Intake of PUFAs is protective for PD as well as MUFAs.	E (Abbott et al., 2003;de Lau et al., 2005)

	Polyunsaturated fatty acids PD patients exhibit higher concentrations of PUFA peroxidation metabolites, but lower concentrations of PUFA and glutathione in the SN compared to controls.	E (Chen et al., 2003)
	PUFAs intake is associated with lower PD risk.	E (Kamel et al., 2013)
	Cholesterol An association between cholesterol and PD is highly debated.	R (Hu, 2010)
	Lower plasma cholesterol concentrations and biosynthesis is found in PD patients compared to controls and that statins use may lower PD ocurrence.	E (Lamperti, 1991)
	Increased cholesterol levels are associated with lower PD risk, primarily in women.	E (de Lau et al., 2006)
	Higher total serum cholesterol may be associated with a modest slower progression of PD.	E (Huang et al., 2011)
	Total HDL-cholesterol ratio is inversely associated with duration of PD and may contribute to cardiometabolic protection.	E (Cassani et al., 2013)
Fruits and Vegetables	Nicotine-containing vegetables from edible Solanaceae are associated with a reduced risk of PD.	E (Searles Nielsen et al., 2013)
	A dietary pattern including high consumption of fruits, vegetables and fish are inversely associated with PD risk.	E (Gao et al., 2007;Okubo et al., 2012)
	No relationship was found between intake of vegetables or fruit and the risk of PD.	E (Miyake et al., 2011a)
	Vitamin C Higher intake of fruits and certain vegetables containing vitamin C is associated with an increased risk of PD.	E (Scheider et al., 1997)
	No significant association between vitamin C from food and PD.	E (Zhang et al., 2002;Etminan et al., 2005)
	Vitamin E Vitamin E from food is associated with a lower risk of PD, particularly in men.	E (Zhang et al., 2002)

Carbohydrates	High glycemic index foods decrease the risk of PD.	E (Murakami et al., 2010a)
	Carbohydrate consumption and PD risk is reported with a non-significant direct association in women and inverse association in men.	E (Chen et al., 2003)
	Total carbohydrate consumption is positively associated with PD.	E (Hellenbrand et al., 1996a)
Protein	**Protein** No correlation is found with total protein intake and the risk of PD.	E (Hellenbrand et al., 1996b;Logroscino et al., 1996;Johnson et al., 1999;Chen et al., 2003)
	Elimination of dietary red meat accompanied with high doses of riboflavin promotes recovery of motor functions in PD patients.	E (Coimbra and Junqueira, 2003)
Beverages	**Caffeine** Caffeinated beverages may provide neuroprotection against PD.	R (Prakash and Tan, 2011)
	Coffee drinking in women who are not taking hormone-replacement therapy is associated with a reduced risk in PD as observed in men.	E (Ascherio and Chen, 2003;Palacios et al., 2012a)
	Clinical studies are underway to evaluate several A_{2A} receptor antagonists for symptomatic relief and slowing of disease progression in PD.	R (Barkhoudarian and Schwarzschild, 2011;Hickey and Stacy, 2011)
	Caffeine appears to improve motor and non-motor conditions in PD clinical trials. Gastrointestinal discomfort and anxiety were common adverse effects.	E (Altman et al., 2011)
	Tea Black tea drinking shows an inverse association with PD risk whereas green tea was unrelated to PD risk in a Chinese population.	E (Tan et al., 2008)
	Tea consumption may reduce the risk of PD.	E (Chan et al., 1998;Checkoway et al., 2002)
	Tea consumption delayed onset of motor symptoms in PD patients.	E (Kandinov et al., 2009)
	Alcohol No association between alcohol consumption and PD.	E (Benedetti et al., 2000;Checkoway et al., 2002;Hernan et al., 2003;Palacios et al., 2012b)

	Inverse association between alcohol consumption and PD.	E (Ragonese et al., 2003)
	Low to moderate beer consumption may lower the risk of PD whereas high liquor consumption may increase PD risk.	E (Liu et al., 2013)
Supplements	**Beta-carotenoids** Higher intake of beta-carotenoids is associated with a decreased risk of PD in women.	E (Miyake et al., 2011a)
	Vitamin B - Riboflavin Daily doses of riboflavin for 6 months show improved motor capacity in PD patients in 3 months.	E (Coimbra and Junqueira, 2003)
	Riboflavin is not associated with risk of PD.	E (Abbott et al., 2003;Murakami et al., 2010b)
	Low intake of vitamin B6 is associated with an increased risk of PD.	E (Murakami et al., 2010b)
	Folate, vitamin B6 and B12 are not associated with a risk of PD.	E (Chen et al., 2004)
	Vitamin C Vitamin C is not associated with PD risk.	E (Zhang et al., 2002) E (Miyake et al., 2011a)
	Vitamin D Intake of vitamin D is not associated with PD risk.	E (Chen et al., 2002)
	Vitamin D3 supplementation prevented the deterioriation of the Hoehn & Yahr stage in PD patients compared to placebo-controlled group.	E (Suzuki et al., 2013)
	Vitamin E Vitamin E is not associated with PD risk.	E (Zhang et al., 2002)
	Clinical trials show no neuroprotective benefit of taking vitamin E.	E (Fernandez-Calle et al., 1992;LeWitt, 1994)
	Higher intake of vitamin E is associated with a reduced risk of PD in women.	E (Miyake et al., 2011a)

Supplementary Table 2. Animal and *in vitro* studies addressing the effects of nutrients in Parkinson's disease. A is animal and IV is *in vitro*.

Classification	Study Result	Reference
Fat	A high fat diet exacerbates the progression of PD in rodents by increasing DA depletion and damage.	A (Choi et al., 2005b;Morris et al., 2010;Bousquet et al., 2011b)
	Polyunsaturated fatty acids inhibit neuronal apoptosis in cellular models.	IV (Kim et al., 2001)
Docosahexaeonic acid (DHA)	DHA reduces apoptosis in dopaminergic cells and preserves DA levels from MPTP-induced neurotoxicity in mice.	IV (Ozsoy et al., 2011) A (Bousquet et al., 2008)
	DHA protected neurons against cytotoxicity, inhibition of NO production, Ca^{2+} influx, and increased the activities of antioxidant enzymes glutathione peroxidase and glutathione reductase.	A (Wang et al., 2003)
	Short-term administration of DHA reduced levodopa-induced dyskinesias in Parkinsonian primates.	A (Samadi et al., 2006)
	DHA treatment elevated DA levels in a 6-OHDA model of PD.	A (Cansev et al., 2008)
	DHA supplementation replaces omega-6-PUFAs already present in the brains post-MPTP treatment.	A (Bousquet et al., 2008)
Eicosapentaenoic acid (EPA)	EPA attenuated motor impairments, and inflammation in a MPTP model of PD.	A (Luchtman et al., 2012) IV (Luchtman et al., 2013)
Caffeine	Chronic caffeine administration in mice provided protection against dopaminergic neuron toxicity from exposure to a combination of common pesticides- Paraquat and Maneb.	A (Kachroo et al., 2010;Yadav et al., 2012)
	Acute and chronic caffeine administration reduced the effect of acute MPTP and 6-OHDA treatment on striatal DA loss.	A (Chen et al., 2001;Joghataie et al., 2004)
	Caffeine treatment partially restored DA and its metabolites in 6-OHDA-lesioned rats.	A (Aguiar et al., 2006)
	Caffeine is neuroprotective in MPTP model of PD.	A (Xu et al., 2010)

	Chronic caffeine treatment prevented DA cell degeneration in a MPTP model of PD. Neuroprotection was still observed after the onset of PD.	A (Sonsalla et al., 2012)
	Caffeine reduces neurotoxicity through antagonism of adenosine A_{2A} receptors.	R (Morelli et al., 2010;Prediger, 2010)
	Methylxanthine A_{2A} receptor antagonists may cause oxidative stress in PD.	A (Golembiowska and Dziubina, 2012)
Soy	Pre-treatment of parkinsonian rats with dietary soy meal improved spatial learning and memory.	A (Sarkaki et al., 2009)
	Genistein appears to be neuroprotective in ovariectomized rats, thereby suggesting it may be useful for prevention of PD in post-menopausal women.	A (Kyuhou, 2008)
	Genistein protects dopaminergic neurons from lipopolysaccharide-induced injury.	IV (Wang et al., 2005)
	Pre-treatment with genisten restored MPTP-induced down regulation of TH, dopamine transporter and Bcl-2 mRNA expression in the midbrain.	A (Liu et al., 2008)
	Genistein administration attenuated the rotational behavior in lesioned rats and protected neurons against 6-OHDA toxicity.	A (Baluchnejadmojarad et al., 2009)
Polyphenols	**EGCG** The green tea polyphenol EGCG is neuroprotective by preventing neurotoxin-induced cell injury and prevent MPTP-induced dopaminergic neurodegeneration.	R (Mandel et al., 2004) A (Levites et al., 2001)
	EGCG provides neuroprotection through nitric oxide reduction.	A (Kim et al., 2010)
	Oral treatment with EGCG provided symptomatic relief but no neuroprotection in 6-OHDA model of PD.	A (Leaver et al., 2009)
	Quercetin Quercetin prevents apoptosis of DA-producing neurons.	IV (Bureau et al., 2008)
	Resveratrol Resveratrol reduces deterioration caused by free radicals preventing subsequent behavioral, biochemical, and histopathological changes that	IV (Bureau et al., 2008)

	occur during PD.	
	Resveratrol prevents apoptosis of DA-producing neurons and exerts neuroprotective effects on 6-OHDA-induced animals by reducing inflammatory reactions as well scavenging free radicals in MPTP.	A (Blanchet et al., 2008;Jin et al., 2008;Lu et al., 2008)
	Theaflavin mediated neuroprotection in MPTP model of PD.	A (Anandhan et al., 2012)
	Carotenoids Pretreatment with beta-carotene partially protected against MPTP-induced neurotoxicity in mice, but not in primates.	A (Perry et al., 1985;Perry et al., 1987)
	Lycopene reduces oxidative stress and cognitive decline in a rotenone induced model of PD.	A (Kaur et al., 2011)
	Sulforaphane Ameliorated motor deficits prevented dopaminergic cell death by modulating oxidative stress.	A (Morroni et al., 2013)
	Erucin Treatment with erucin provided neuroprotective effects against 6-OHDA in a neuronal cell culture model.	IV (Tarozzi et al., 2012)
Wheat germ	Wheat germ oil is neuroprotective in 6-OHDA model of PD.	A (Wang et al., 2010)
Vitamin D	Vitamin D is beneficial in animal and cell culture models of PD.	A (Wang et al., 2001;Smith et al., 2006) IV (Holick, 2007)
Vitamin E	Vitamin E supplementation protected DA neurons in the SNpc, reduced DA loss and showed protection against paraquat toxicity.	A (Lan and Jiang, 1997;Storch et al., 2000a;Roghani and Behzadi, 2001)
Curcumin and naringen	Curcumin and naringenin promote neuroprotection in PD.	IV (Chen et al., 2006) A (Zbarsky et al., 2005;Rajeswari, 2006)

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